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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/786,106

07/19/2001

Philip John Turner

1448

8464

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7590

03/20/2003

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EXAMINER

SUN, XIUQIN

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,106

Applicant(s)

TURNER, PHILIP JOHN

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 16 and 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application):
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- ☐ Interview Summary (PTO-413) Paper No(s) ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-8, 11, 12 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Karpa (U.S. Pat. No. 4658921):

Karpa teaches a system and method (col. 1, line 59 to col. 3, line 2; col. 3, lines 22-58; col. 4, lines 17-23 and Figs. 1-3) for calibrating a plurality of weighing installations of the kind having a working configuration of at least one working load cell (2) with a fixed side and a load-bearing side, a support for the fixed side of the load cell (3), and a load operatively mounted on the load-bearing side of the load cell (1), comprising portable apparatus moveable between installations to be calibrated (8, 9, 10, 11, 12, 13, 14 and 15), and fixed apparatus at each installation to be calibrated (4, 16, 17 and 18), wherein the portable apparatus includes a reference load cell (11) and a fluid ram (12 and 13), the fixed apparatus includes anchorage means (4, 16, 17 and 18) fast with the working load cell support (3), and the reference cell and the ram are removably connectable between the anchorage means and the load-bearing side of the working load cell (8, 9, 10 and 14) to apply calibrating loads to the working load cell in its

working configuration (Figs. 1-3; and col. 2, lines 40-52). Karpa further teaches that: said support for the fixed side of the load cell comprises a load plate (col. 3, lines 22-30), and the anchorage means are incorporated into each load plate (col. 3, lines 22-30); said support for the fixed side of the load cell comprises a load plate fastened to a solid base, and the anchorage means are provided on the solid base (col. 3, lines 22-30); said anchorage means comprise two pairs of parallel upstanding webs on either side of the load cell, the webs having slots to provide an anchorage (Figs. 1-2; and col. 3, lines 26-30); said portable apparatus includes a cradle removably connectable to the anchorage means, holding the fluid ram in position to apply a calibrating load to the working load cell, and said cradle includes tie bars for engagement with the anchorage means joined by a cross beam to which the ram is attached (Figs 1-2; and col. 3, lines 26-35); said the cradle includes position adjustment means to permit the reference cell to be properly positioned in relation to the working cell (col. 3, lines 35-37); said system including a self levelling washer located between the portable apparatus and the load-bearing side of the working load cell (col. 3, lines 30-35); said reference load cell is a pancake load cell in which a central core is supported by shear webs from an outer rim (Fig. 1 and col. 3, lines 31-33).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karpa (U.S. Pat. No. 4658921) in view of Maresca, Jr. et al. (U.S. Pat. No.).

Karpa teach a system and method that includes the subject matter discussed above. Karpa does not mention explicitly: said anchorage means comprise flat areas of ferromagnetic material engageable by electromagnets carried by the portable apparatus.

Maresca et al. teach a anchorage means for anchoring a scale to a baseplate, wherein said anchorage means comprise flat areas of ferromagnetic material engageable by electromagnets carried by the said scale (Figs. 12; and col. 15, lines 11-31).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Maresca anchorage means in the Karpa system in order to provide an alternative technique of anchorage (Maresca et al., col. 15, lines 20-25).

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karpa (U.S. Pat. No. 4658921).

Karpa teach a system and method that includes the subject matter discussed above. Karpa does not mention explicitly: said calibrating load is transmitted to the working load cell through a part of a weigh vessel; and said calibrating load is transmitted to the working load cell through a vessel support bracket.

Karpa, however, teaches that said calibrating load is transmitted to the working load cell through a part of a scale platform (Fig2. 1-2, col. 2, lines 44-53 and col. 3, lines 30-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a vessel support bracket for Karpa's weigh platform, since the examiner takes Official Notice of the equivalence of Karpa's scale platform and a vessel support bracket for their use in supporting whatever is to be weighed by a weighing installation, and the selection of any of these known equivalents to provide a weighing installation would be within the level of ordinary skill in the art.

8. Claims 13-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karpa (U.S. Pat. No. 4658921).

Karpa teach a system and method that includes the subject matter discussed above. Karpa does not mention explicitly: said portable apparatus includes as many reference load cells and fluid rams as are necessary to apply calibrating loads to each of the plurality of working load cells in its working configuration; said portable apparatus includes means for supplying fluid under pressure to the fluid ram associated with each one of the plurality of reference load cells, means for recording each calibrating load applied thereto as measured by the reference load cells, and means for recording the corresponding output of the working load cells to provide a calibration record; and said portable apparatus includes control means for varying the pressure of the fluid supplied to the rams whereby to control the force exerted by a given ram on the corresponding

reference and working load cells in a sequence of calibration steps for each working load cell.

Karpa, however, teaches that said portable apparatus includes one reference load cell and an associated fluid ram as is necessary to apply calibrating load to one of the plurality of working load cells in its working configuration (col. 1, line 59 to col. 3, line 2; col. 3, lines 22-58; col. 4, lines 17-23 and Figs. 1-3); said portable apparatus includes means for supplying fluid under pressure to the fluid ram associated with said reference load cell, means for recording said calibrating load applied thereto as measured by the reference load cell, and means for recording the corresponding output of the working load cells to provide a calibration record (col. 2, lines 40-57; and col. 3, lines 35-41); said portable apparatus includes control means for varying the pressure of the fluid supplied to the ram whereby to control the force exerted by a given ram on the corresponding reference and working load cells in a sequence of calibration steps for said working load cell (col. 2, lines 40-57; col. 3, lines 35-41; and col. 4, lines 8-10).

In view of the teaching of Karpa, one having ordinary skill in the art at the time the invention was made would be able to apply the same technique of constructing a reference loading assembly to a group of reference load cells and fluid rams as are necessary to apply calibrating loads to each of the plurality of working load cells in its working configuration. The mere application of a known technique to a group of instances by those skilled in the art would have been obvious.

Allowable Subject Matter

9. Claims 16 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

10. The primary reason for the allowance of claims 16 and 21 is the inclusion of the limitation of diverting fluid to the ram or rams associated with each of the plurality of reference load cells in turn, and for selecting the outputs of the corresponding load cells for recording. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

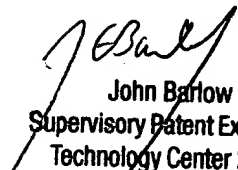
Art Unit: 2863

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

XS

XS

March 10, 2003


John Barlow
Supervisory Patent Examiner
Technology Center 2800